

A Weekly Surveillance Summary of U.S. COVID-19 Activity





Nationally, levels of influenza-like illness (ILI) are below baseline but higher than typically seen at this time of year. Indicators that track ILI and COVID-19-like illness (CLI) showed decreases nationally from week 30 to week 31, with decreasing or stable (change of ≤ 0.1%) levels in all regions of the country. Nationally, the percentage of laboratory tests positive for SARS-CoV-2 decreased from week 30 to week 31 and decreased in nine of ten HHS regions. Weekly hospitalization rates and mortality attributed to COVID-19 declined during week 31 but may change as more data for admissions and deaths occurring during the most recent weeks are received. Mortality attributed to COVID-19 remains above the epidemic threshold.

## Virus

## Public Health, Commercial and Clinical Laboratories

Nationally, the overall percentage of respiratory specimens testing positive for SARS-CoV-2 decreased from 8.7% during week 30 to 7.8% during week 31. Decreases were seen in nearly all regions. National percentages of specimens testing positive for SARS-CoV-2 by type of laboratory are listed as follows:

- Public health laboratories decreased from 8.2% during week 30 to 7.8% during week 31;
- Clinical laboratories decreased from 7.3% during week 30 to 6.8% during week 31;
- Commercial laboratories decreased from 8.9% during week 30 to 7.8% during week 31.

# **Outpatient and Emergency Department Visits**

# Outpatient Influenza-Like Illness Network (ILINet) and National Syndromic Surveillance Program (NSSP)

Two surveillance networks are being used to track outpatient or emergency department (ED) visits for illness with symptoms compatible with COVID-19.

- Nationally, ILI activity remains below baseline for the sixteenth week but is higher than typically seen at this time of year.
- Nationally, during week 31, the percentage of visits reported by ILINet participants for ILI was 1.2%, and the percentage of visits for CLI reported to NSSP was 2.9%. These percentages appear stable with only slight fluctuations seen over the most recent three weeks.
- Recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit emergency department (ED) visits to severe illnesses and increased social distancing, are likely affecting data reported from both networks, making it difficult to draw conclusions at this time. Tracking these systems moving forward will give additional insight into illness related to COVID-19.

#### **Severe Disease**

## Hospitalizations

Cumulative COVID-19-associated hospitalization rates since March 1, 2020, are updated weekly. The overall cumulative COVID-19 hospitalization rate is 137.6 per 100,000, with the highest rates in people aged 65 years and older (378.8 per 100,000) and 50-64 years (207.4 per 100,000).

#### **Mortality**

Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) increased from week 26 – week 29 (June 27 – July 18) for the first time since mid-April. The percentage for week 31 is 7.8% and currently lower than the percentage during week 30 (12.6%); however, the percentage remains above the epidemic threshold. Percentages for recent weeks will likely increase as more death certificates are processed.

# **Key Points**

- The percentage of specimens testing positive for SARS-CoV-2 decreased in nine of ten HHS regions from week 30 to week 31. Percentages of visits for ILI and CLI decreased or remained stable (change of  $\leq 0.1\%$ ).
- Using combined data from the three laboratory types, the national percentage of respiratory specimens testing positive for SARS-CoV-2 with a molecular assay decreased from 8.7% during week 30 to 7.8% during week 31.
  - The highest percentages of specimens testing positive for SARS-CoV-2 were seen in Regions 4 (South East, 12.7%), 6 (South Central, 14.4%) and 9 (South West/Coast, 8.8%); however, the percentages are decreasing in these three regions following peaks seen in weeks 27 and 28.
- The percentage of outpatient and ED visits for ILI are below baseline nationally and in all regions of the country; however, ILI activity is above what is typical for this time of year. The percentage of visits to EDs for CLI decreased nationally for the third consecutive week, and compared to the previous week, decreased or remained stable in all ten HHS regions.
  - Systems monitoring ILI and CLI may be influenced by recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit emergency department (ED) visits to severe illnesses and increased social distancing.
- The overall cumulative COVID-19-associated hospitalization rate was 137.6 per 100,000; rates were highest in people 65 years of age and older (378.8 per 100,000) followed by people 50-64 years (207.4 per 100,000). Cumulative hospitalization rates will increase as the pandemic continues.
  - From week 25 week 28 (weeks ending June 20 July 11), overall weekly hospitalization rates increased for three consecutive weeks. Weekly rates have declined during the most recent three weeks but may increase as more data are received.
  - Non-Hispanic American Indian or Alaska Native persons had an age-adjusted hospitalization rate approximately 5.2 times that of non-Hispanic White persons. Rates among non-Hispanic Black persons and Hispanic or Latino persons were both approximately 4.7 times the rate among non-Hispanic White persons.
- Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) increased from week 26 – week 29 (weeks ending June 27 – July 18) after declining for 11 weeks since mid-April. The percentage of deaths due to PIC for week 31 is 7.8%, lower than the percentage during week 30 (12.6%), but above the epidemic threshold. These percentages will likely increase as more death certificates are processed.
- All surveillance systems aim to provide the most complete data available. Estimates from previous weeks are subject to change as data are updated with the most complete data available.



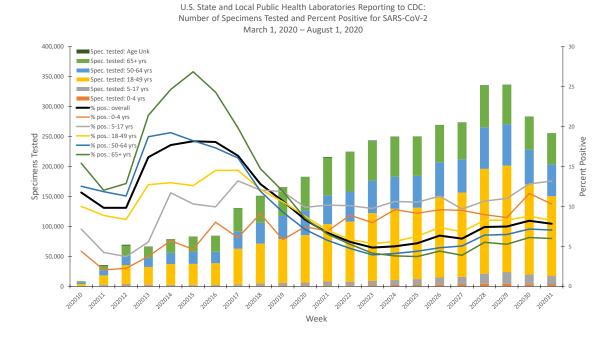
## **U.S. Virologic Surveillance**

The number of specimens tested for SARS-CoV-2 using a molecular assay and reported to CDC by public health laboratories and a subset of clinical and commercial laboratories in the United States are summarized below. All laboratories are performing primary diagnostic functions; therefore, the percentage of specimens testing positive across laboratory types can be used to monitor overall trends in COVID-19 activity. As the outbreak progresses, it is possible that different types of laboratories will take on different roles, and the data interpretation may need to change.

Summary of Laboratory Testing Results Reported to CDC*	Week 31 (July 26 – August 1, 2020)	Cumulative since March 1, 2020		
No. of specimens tested	1,951,609	34,990,702		
Public Health Laboratories	255,628	4,011,003		
Clinical Laboratories	137,916	3,391,898		
Commercial Laboratories	1,558,065	27,587,801		
No. of positive specimens (%)	151,488 (7.8%)	3,305,091 (9.4%)		
Public Health Laboratories	20,026 (7.8%)	332,644 (8.3%)		
Clinical Laboratories	9,401 (6.8%)	217,384 (6.4%)		
Commercial Laboratories	122,061 (7.8%)	2,755,063 (10.0%)		

<sup>\*</sup> Commercial and clinical laboratory data represent select laboratories and do not capture all tests performed in the United States.

## **Public Health Laboratories**

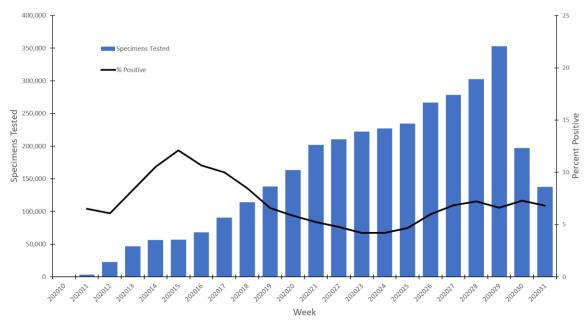




#### **Clinical Laboratories**

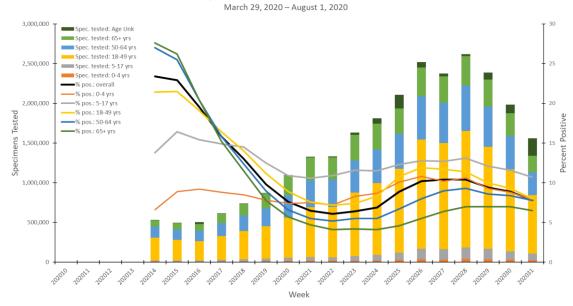
U.S. Clinical Laboratories Reporting to the National Respiratory and Enteric Virus Surveillance System: Number of Specimens Tested and Percent Positive for SARS-CoV-2

March 8, 2020 – August 1, 2020



## **Commercial Laboratories**

Select Commercial Laboratories Reporting to CDC:
Number of Specimens Tested and Percent Positive for SARS-CoV-2



<sup>\*</sup> Commercial laboratories began testing for SARS-CoV-2 in early March, but the number and geographic distribution of reporting commercial laboratories became stable enough to calculate a weekly percentage of specimens testing positive as of March 29, 2020.

## Additional virologic surveillance information: Surveillance Methods



## **Outpatient/Emergency Department Illness**

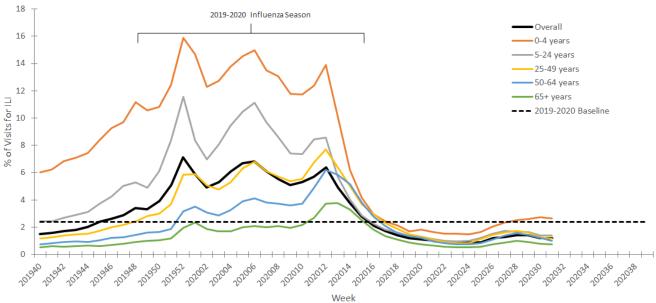
Two syndromic surveillance systems are being used to monitor trends in outpatient and emergency department (ED) visits that may be associated with COVID-19 illness. Each system monitors a slightly different syndrome, and together, these systems provide a more comprehensive picture of mild-to-moderate COVID-19 illness than either would individually. Both systems are currently being affected by changes in health care seeking behavior, including increased use of telemedicine, compliance with recommendations to limit ED visits to severe illnesses and increased social distancing. These changes affect the numbers of people seeking care in the outpatient and ED settings and their reasons for doing so.

#### **ILINet**

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) provides data on visits for influenza-like illness (ILI) (fever [≥ 100°F] and cough and/or sore throat) to approximately 2,600 primary care providers, emergency departments and urgent care centers in all 50 states, Puerto Rico, the District of Columbia and the U.S. Virgin Islands. Mild COVID-19 illness presents with symptoms similar to ILI, so ILINet is being used to track trends of mild-to-moderate COVID-19 illness and allows for comparison with prior influenza seasons.

Nationwide during week 31, 1.2% of patient visits reported through ILINet were due to ILI. This percentage is well below the national baseline of 2.4% but, while low overall, is higher than what is typical for this time of year compared to previous influenza seasons. Compared to week 30, the percentage of visits for ILI during week 31 was the same or slightly lower overall and for all age groups.





<sup>\*</sup> Age-group specific percentages should not be compared to the national baseline.



On a <u>regional level</u>, the percentage of outpatient visits for ILI ranged from 0.5% to 1.6% during week 31. All ten regions are below their region-specific baselines, and only slight fluctuations in the percentage of outpatient visits for ILI have been seen over the most recent three weeks.

Note: In response to the COVID-19 pandemic, new data sources will be incorporated into ILINet as we move into summer weeks, when lower levels of influenza and other respiratory virus circulation are typical. Starting in week 21, increases in the number of patient visits will be seen as new sites are enrolled and the percentage of visits for ILI may change in comparison to previous weeks. While all regions remain below baseline levels for ILI, these system changes should be considered when drawing conclusions from these data. Any changes in ILI due to changes in respiratory virus circulation will be highlighted here.

## **ILI Activity Levels**

Data collected in ILINet are used to produce a measure of <u>ILI activity</u> for all 50 states, Puerto Rico, the District of Columbia and New York City. The mean reported percentage of visits due to ILI for the current week is compared to the mean reported during non-influenza weeks, and the activity levels correspond to the number of standard deviations below, at or above the mean.

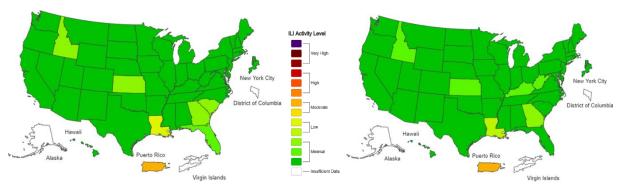
The number of jurisdictions at each activity level during week 31, and changes compared to the previous week are summarized in the table below and shown in the following maps.

	Number of Jurisdictions				
Activity Level	Week 31 (Week ending August 1, 2020)	Compared to Previous Week			
Very High	0	No change			
High	0	No change			
Moderate	1	No change			
Low	1	No change			
Minimal	49	No change			
Insufficient Data	3	No change			



#### ILI Activity Level Map, Week 30 Ending July 25, 2020

#### ILI Activity Level Map, Week 31 Ending August 1, 2020

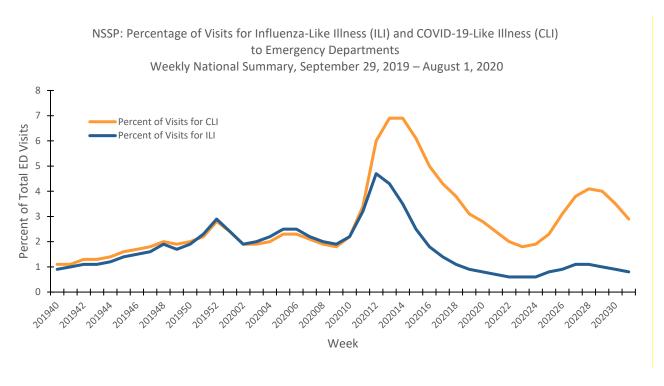


\*Data collected in ILINet may disproportionally represent certain populations within a state and may not accurately depict the full picture of influenza activity for the whole state. Differences in the data presented here by CDC and independently by some state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.

National Syndromic Surveillance Program (NSSP): Emergency Department (ED) Visits NSSP is a collaboration among CDC, federal partners, local and state health departments and academic and private sector partners to collect, analyze and share electronic patient encounter data received from multiple health care settings. To track trends of potential COVID-19 visits, visits for COVID-19-like illness (CLI) (fever and cough or shortness of breath or difficulty breathing or presence of a coronavirus diagnosis code) and ILI to a subset of emergency departments in 47 states are being monitored.

Nationwide during week 31, 2.9% of emergency department visits captured in NSSP were due to CLI and 0.8% were due to ILI. Compared to week 30, this week there was a decrease in both percentages of visits for CLI and ILI. This was the third consecutive week the percentages of visits for CLI and ILI decreased since week 28. During these three weeks, the percentages of visits for CLI and ILI decreased or remained stable (changes of ≤ 0.1%) in all ten HHS regions.





Additional information about medically attended outpatient and emergency department visits for ILI and CLI: Surveillance Methods

## **Hospitalizations**

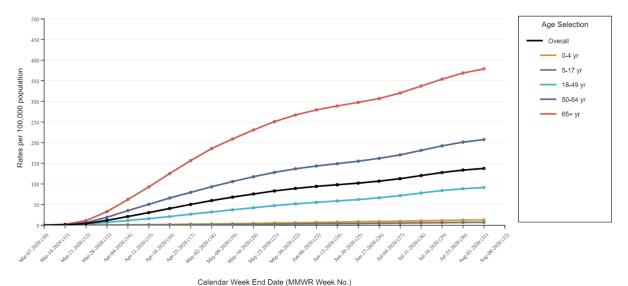
The COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) conducts population-based surveillance for laboratory-confirmed COVID-19-associated hospitalizations in select counties participating in the Emerging Infections Program (EIP) and the Influenza Hospitalization Surveillance Project (IHSP).

A total of 44,865 laboratory-confirmed COVID-19-associated hospitalizations were reported by sites between March 1, 2020, and August 1, 2020. The overall cumulative hospitalization rate was 137.6 per 100,000 population. Among the 0-4 year, 5-17 year, 18-49 year, 50-64 year and  $\geq$  65 year age groups, the highest rate of hospitalization was among adults aged  $\geq$  65 years, followed by adults aged 50-64 years and adults aged 18-49 years.



## Laboratory-Confirmed COVID-19-Associated Hospitalizations

## Preliminary cumulative rates as of Aug 01, 2020



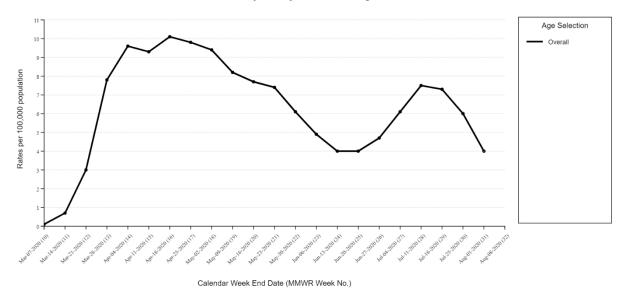
Age Group	Cumulative Rate per 100,000 Population
Overall	137.6
0-4 years	12.9
5-17 years	7.0
18-49 years	91.3
18-29 years	55.9
30-39 years	90.0
40-49 years	138.5
50-64 years	207.4
65+ years	378.8
65-74 years	281.3
75-84 years	451.4
85+ years	695.0

From June 20 (MMWR week 25) – July 11 (MMWR week 28), there was an increase in overall weekly hospitalization rates for three consecutive weeks. Data for weeks ending July 18, July 25 and August 1 (MMWR weeks 29, 30 and 31) currently show a decline; however, those data are likely to change as more data for admissions occurring during these weeks are received.

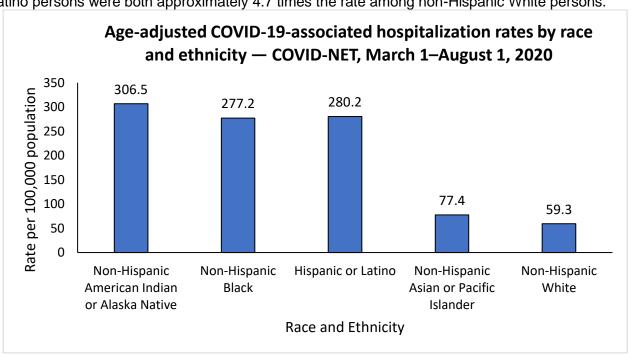


## Laboratory-Confirmed COVID-19-Associated Hospitalizations

Preliminary weekly rates as of Aug 01, 2020



Among the 44,865 laboratory-confirmed COVID-19-associated hospitalized cases, 41,989 (93.6%) had information on race and ethnicity, while collection of race and ethnicity was still pending for 2,876 (6.4%) cases. When examining overall age-adjusted rates by race/ethnicity, non-Hispanic American Indian or Alaska Native persons had an age-adjusted hospitalization rate approximately 5.2 times that of non-Hispanic White persons. Rates for non-Hispanic Black persons and Hispanic or Latino persons were both approximately 4.7 times the rate among non-Hispanic White persons.





When examining age-stratified crude hospitalization rates by race and ethnicity, compared with non-Hispanic white persons in the same age group, crude hospitalization rates were 8.1 times higher among Hispanic or Latino persons aged 0-17 years; 9.3 times higher among non-Hispanic American Indian or Alaska Native persons aged 18-49 years; 7.1 times higher among non-Hispanic American Indian or Alaska Native persons aged 50-64 years; and 3.8 times higher among non-Hispanic Black persons aged ≥ 65 years.

# Hospitalization rates per 100,000 population by age and race and ethnicity — COVID-NET, March 1, 2020–August 1, 2020

Age Category	Non-Hispanic American Indian or Alaska Native		Non-Hispanic Black		Hispanic or Latino		Non-Hispanic Asian or Pacific Islander		Non-Hispanic White	
	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>
0-17y	9.7	4.6	11.2	5.3	17.1	8.1	4.0	1.9	2.1	1
18-49y	225.3	9.3	142.4	5.9	218.7	9.1	41.8	1.7	24.1	1
50-64y	553.0	7.1	426.3	5.4	473.7	6.0	124.3	1.6	78.4	1
65+y	651.9	2.9	860.1	3.8	605.3	2.7	233.2	1.0	228.2	1
Overall rate <sup>3</sup> (age-adjusted)	306.5	5.2	277.2	4.7	280.2	4.7	77.4	1.3	59.3	1

<sup>&</sup>lt;sup>1</sup> COVID-19-associated hospitalization rates by race/ethnicity are calculated using hospitalized COVID-NET cases with known race and ethnicity for the numerator and NCHS bridged-race population estimates for the denominator.

Non-Hispanic Black persons and non-Hispanic White persons represented the highest proportions of hospitalized cases reported to COVID-NET, followed by Hispanic or Latino, non-Hispanic Asian or Pacific Islander and non-Hispanic American Indian or Alaska Native persons. However, some racial and ethnic groups are disproportionately represented among hospitalized cases as compared with the overall population of the catchment area. Prevalence ratios showed a similar pattern to that of the age-adjusted hospitalization rates: non-Hispanic American Indian or Alaska Native persons have the highest prevalence ratio, followed by non-Hispanic Black and Hispanic or Latino persons.



<sup>&</sup>lt;sup>2</sup> For each age category, rate ratios are the ratios between crude hospitalization rates within each racial/ethnic group and the crude hospitalization rate among non-Hispanic white persons in the same age category.

<sup>&</sup>lt;sup>3</sup> Overall rates are adjusted to account for differences in age distributions within race/ethnicity strata in the COVID-NET catchment area; the age strata used for the adjustment include 0-17, 18-49, 50-64 and 65+ years.

# Comparison of proportions of COVID-19-Associated Hospitalizations, by race and ethnicity, COVID-NET, March 1-August 1, 2020

	Non-Hispanic American Indian or Alaska Native	Non- Hispanic Black	Hispanic or Latino	Non-Hispanic Asian or Pacific Islander	Non- Hispanic White
Proportion of hospitalized COVID- NET cases <sup>1</sup>	1.4%	32.8%	23.2%	4.9%	31.4%
Proportion of population in COVID-NET catchment area	0.7%	17.9%	14.1%	8.9%	58.5%
Prevalence ratios <sup>2</sup>	2.0	1.8	1.6	0.6	0.5

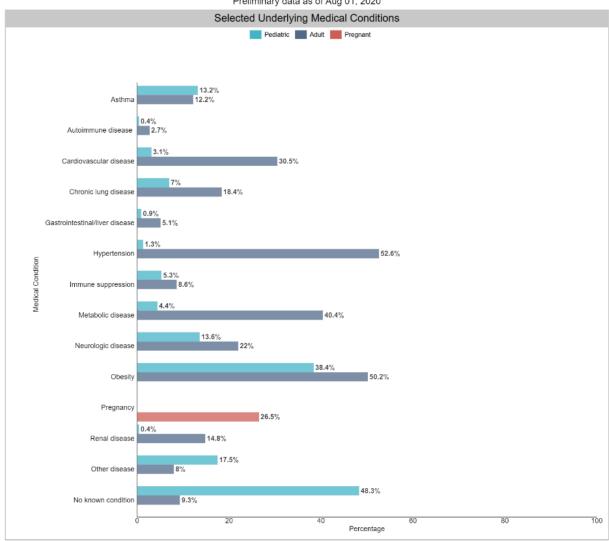
<sup>&</sup>lt;sup>1</sup> Persons of multiple races (0.2%) or unknown race and ethnicity (6.1%) are not represented in the table but are included as part of the denominator.

Among 11,245 hospitalized adults with information on underlying medical conditions, 90.7% had at least one reported underlying medical condition. The most commonly reported were hypertension, obesity, metabolic disease and cardiovascular disease. Among 230 hospitalized children with information on underlying conditions, 51.7% had at least one reported underlying medical condition. The most commonly reported were obesity, neurologic conditions and asthma.



<sup>&</sup>lt;sup>2</sup> Prevalence ratio is calculated as the ratio of the proportion of hospitalized COVID-NET cases over the proportion of population in COVID-NET catchment area.

COVID-19 Laboratory-Confirmed Hospitalizations Preliminary data as of Aug 01, 2020



<u>Additional data</u> on demographics, signs and symptoms at admission, underlying conditions, interventions, outcomes and discharge diagnoses, stratified by age, sex and race and ethnicity, are available.

## Additional hospitalization surveillance information:

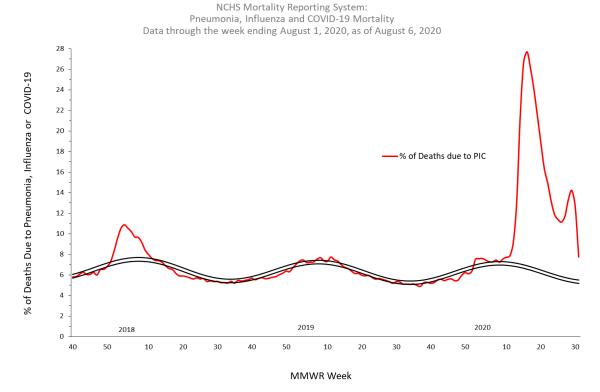
Surveillance Methods | Additional rate data | Additional demographic and clinical data



## **Mortality Surveillance**

The National Center for Health Statistics (NCHS) collects death certificate data from vital statistics offices for all deaths occurring in the United States. Based on death certificate data available on August 6, 2020, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) increased from week 26 – week 29 (June 27 – July 18) after declining for 11 weeks since mid-April. The percentage of deaths due to PIC for week 31 is 7.8% and, while lower than the percentage during week 30 (12.6%), remains above the epidemic threshold. Percentages for recent weeks will likely increase as more death certificates are processed.

Weekly mortality surveillance data include a combination of machine coded and manually coded causes of death collected from death certificates. Percentages of deaths due to PIC are higher among manually coded records than more rapidly available machine coded records. Due to the additional time needed for manual coding, the initially reported PIC percentages may be lower than percentages calculated from final data.



\*Data during recent weeks are incomplete because of the lag in time between when the death occurred and when the death certificate is completed, submitted to NCHS and processed for reporting purposes.

Additional NCHS mortality surveillance information: <u>Surveillance Methods</u> | <u>Provisional Death</u> Counts for COVID-19

Report prepared: August 6, 2020

Detailed data tables are available on the COVIDView page

